

Purified anti-human CD123 Antibody

Catalog# / Size	306002 / 100 µg
Clone	6H6
Regulatory Status	RUO
Other Names	IL-3R α , IL-3 Receptor alpha
Isotype	Mouse IgG1, κ
Description	CD123 is the 70 kD transmembrane α chain of the IL-3 receptor. Alone, CD123 binds IL-3 with low affinity; when CD123 associates with CDw131 (common β chain), it binds IL-3 with high affinity. CD123 does not transduce intracellular signals upon binding IL-3 and requires the β chain for this function. CD123 is expressed by myeloid precursors, macrophages, dendritic cells, mast cells, basophils, megakaryocytes, and some B cells.

Product Details

Verified Reactivity	Human
Reported Reactivity	Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human IL-3R α transfected COS cells.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested CyTOF® - Verified IHC-F, IP, WB - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is \leq 1.0 µg per million cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Clone 6H6 does not inhibit IL-3 binding to low- or high-affinity IL-3Rs. Additional reported applications (for the relevant formats) include: Western blotting ¹ , immunoprecipitation ¹ , and immunohistochemical staining of acetone-fixed frozen sections ² and also paraformaldehyde fixed paraffin embedded tissue ⁷ .
Application References	<ol style="list-style-type: none"> 1. Sun Q, <i>et al.</i> 1996. <i>Blood</i> 87:83. (IP, WB) 2. Herling M, <i>et al.</i> 2003. <i>Blood</i> 101:5007. (IHC) 3. Charles N, <i>et al.</i> 2010. <i>Nat. Med.</i> 16:701. (FC) PubMed 4. Martin-Gayo E, <i>et al.</i> 2010. <i>Blood</i> 115:5366. PubMed 5. Chen SC, <i>et al.</i> 2010. <i>Arch Dermatol Res.</i> 302:113. PubMed 6. Liu Y, <i>et al.</i> 2012. <i>Food Chem Toxicol.</i> 50:1920. PubMed 7. Peduzzi E, <i>et al.</i> 2007. <i>J. Invest. Dermatol.</i> 127:638. (IHC)
Product Citations	<ol style="list-style-type: none"> 1. Dallari S, <i>et al.</i> 2017. <i>Nat Commun.</i> 8:14830. PubMed 2. Rosa TLSA, <i>et al.</i> 2022. <i>Front Med (Lausanne).</i> 9:899998. PubMed 3. Friebe E, <i>et al.</i> 2020. <i>Cell.</i> 181(7):1626-1642.e20. PubMed 4. Wagner J <i>et al.</i> 2019. <i>Cell.</i> 177(5):1330-1345. PubMed 5. Parackova Z, <i>et al.</i> 2020. <i>Sci Rep.</i> 0.759027778. PubMed 6. Kremenovic M, <i>et al.</i> 2020. <i>Cancers (Basel).</i> 12:. PubMed
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RRID AB_314576 (BioLegend Cat. No. 306002)

Antigen Details

Structure	Ig superfamily, type I transmembrane glycoprotein, associates with CDw131, 70 kD
Distribution	Myeloid precursors, basophils, mast cells, macrophages, dendritic cells, megakaryocytes, subset of lymphocytes
Function	Hematopoietic cell proliferation, differentiation
Ligand/Receptor	IL-3
Cell Type	Basophils, Dendritic cells, Hematopoietic stem and progenitors, Lymphocytes, Macrophages, Mast cells, Megakaryocytes
Biology Area	Immunology
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	1. Miyajima A, <i>et al.</i> 1993. <i>Blood</i> 82:1960.
Gene ID	3563

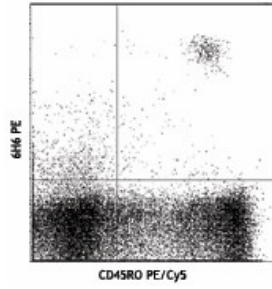
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-human CD123, PE anti-human CD123, Purified anti-human CD123, PE/Cyanine5 anti-human CD123, PE/Cyanine7 anti-human CD123, APC anti-human CD123, FITC anti-human CD123, PerCP/Cyanine5.5 anti-human CD123, Brilliant Violet 421™ anti-human CD123, Brilliant Violet 650™ anti-human CD123, Brilliant Violet 510™ anti-human CD123, Alexa Fluor® 647 anti-human CD123, Brilliant Violet 605™ anti-human CD123, Purified anti-human CD123 (Maxpar® Ready), Brilliant Violet 711™ anti-human CD123, Brilliant Violet 785™ anti-human CD123, PE/Dazzle™ 594 anti-human CD123, Alexa Fluor® 488 anti-human CD123, TotalSeq™-A0064 anti-human CD123, Alexa Fluor® 700 anti-human CD123, APC/Fire™ 750 anti-human CD123, Pacific Blue™ anti-human CD123, TotalSeq™-C0064 anti-human CD123, TotalSeq™-B0064 anti-human CD123, TotalSeq™-D0064 anti-human CD123, PerCP anti-human CD123, GMP PE/Cyanine7 anti-human CD123, APC/Fire™ 810 anti-human CD123 Antibody

Product Data



Human peripheral blood lymphocytes
stained with 6H6 PE and CD45RO
PE/Cy5

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